

## 'FIRE-LIGHTING.'

BY GEORGE H. MACKAY.

'FIRE-LIGHTING' is practised to a greater or less extent by a few market gunners exclusively for gain in the shallow bays adjacent to the Atlantic seaboard. There is a strong general, as well as local, sentiment against the pursuit of water fowl in this manner, and the laws are generally pronounced against it. For this reason it is a rather difficult matter to obtain much reliable information regarding it from those engaged in this calling.

We consequently have but limited knowledge as to the *modus operandi* of pursuing water fowl in this way or its effects. My desire to know something about Fire-lighting has been strengthened from time to time, while on my shooting trips, by seeing usually just after dark, certain lights creeping slowly out on the bay, or moving silently along the shores, and which, as I watched them, would often change from dazzling brightness to total darkness. It was some years before I had an opportunity to investigate these lights, but it finally came through an experienced bayman whom I had previously employed, and who, at times, went after water fowl in this manner.

The great desideratum in this kind of shooting is the lantern, as on its construction much depends, and I describe it from memory in detail in order that a better idea may be formed of the effect its use is likely to produce on birds. A large light is necessary. A locomotive headlight would serve admirably, for it throws a broad and strong light. A small lantern would be of comparatively little use, for the more powerful and far reaching the rays of light, the better the chance of successfully approaching the water fowl. As not many of the baymen can afford a locomotive head-light the result is a variety of lanterns are used, varying according to the means and ingenuity of the owner. The one my boatman used might come under the head of first class lights. It was about fourteen inches wide and eighteen inches high, and was made of tin with plain glass on three sides, the back being tin, bright inside and supporting two large reflectors, in front of which were placed two kerosene lamps with large burners. Tin

doors lined with looking glass were attached to the plain glass sides, thus leaving only the front uncovered. There were funnels at the top to carry off the heat and smoke from the lamps. When ready for use the lantern is securely fastened on the bow of a small boat. The lamps are then lighted and turned low. The boatman rows towards the birds he is in quest of and which may be a quarter of a mile away, resting on some sand bar, or feeding along the shore. Canada Geese are the birds usually pursued. When sufficiently near for his purpose (it now being quite dark), he turns up the lamps, and the looking glass doors are opened and kept in place by a wire rod at such an angle as to focus the rays of light in conjunction with the reflectors at the back. Thus there is cast ahead of the boat a broad and far reaching stream of light. Dark evenings are most suitable, and the water should be smooth. It is desirable that the boat have smooth sides, instead of lap streaks, as the water makes a noise when striking against the latter. The boatman stands or sits at the stern with his gun in readiness, and sculls or poles the boat according to the depth of water.

Great care must be exercised in approaching birds, as a careless knock of the oar against the boat may alarm them. After the birds have come within the rays of light, they must be kept covered by it until shot at, for a change from light to darkness will cause them to fly. A thorough knowledge of the surroundings, and judgment in guiding the boat by the direction of the wind, is necessary to prevent getting turned around, or going to the windward, when the birds may scent your approach. Before starting out, it is important to know the whereabouts of one or more flocks of birds. I remember an afternoon, there being every indication of a favorable evening, when twenty-five Canada Geese sat on a sand bar about a mile from where we were. My boatman said, "We will go after them with the lantern tonight." While on our way to them I sat behind the lantern perfectly still with cocked gun, while the boatman, standing upright in the stern with his gun beside him, sculled silently along, the stream of light from our lantern, with its well-defined limits, lighting up for quite a distance the path in front of the boat. Presently he asked in a whisper if I saw the Geese; I replied "No," and he pointed out some indistinct specks ahead of us. As the wind was blowing across the boat there was no danger of our being scented. As we approached I did not take my eyes from the

Geese. They did not appear afraid or suspicious, but acted in the most natural manner possible. One preened its feathers, another rubbed the side of its head on its back, another dipped its bill in the water, of which there was a depth of about three or four inches on the bar, on which they were standing. The rays of the lantern covered the flock, while outside of its limits all was inky darkness. Not the slightest curiosity or uneasiness was evinced by them on the approach of the light. The boat meanwhile approached too near, being within fifteen yards of them, and although they were not standing close together, we were now obliged to fire. Confusion followed the reports; but it was soon still. Those that could do so flew away, leaving seven dead. That we could have gone into their very midst, seems probable.

Leaving this locality we headed out from shore in search of a large flock of Brant which we had heard when on our way to the Geese. We had no difficulty in finding them, but could not get near enough to see them although we chased them for a long distance by their calls, being quite near them at times. These birds swim faster than the boat can be propelled, and I am told are as a rule difficult to approach. Having decided to return, we were silently moving along the edge of the marsh, sweeping the water adjacent to the shore with our light, when a pair of Black Ducks were observed, feeding and paddling in the rays of the lantern. They were perfectly unconcerned, and although the boatman was standing up, they could neither see nor hear anything. They would turn around and lower their heads to the water. I saw no signs of fear or curiosity, and they showed no particular interest in the light. I finally perceived a slight uneasiness, and as we approached nearer they commenced to swim away with their heads up, apparently with a suspicion that all was not as it should be. I think they may have heard us whispering, still they made no attempt to fly until we fired at them from a distance of not over a dozen or fifteen yards.

Several years after I tried an experiment to see how near I could walk up to a flock of Common Terns (*Sterna hirundo*) with an ordinary hand lantern. They were roosting on the beach. I found I could approach to within about three or four yards of some of them, when they would fly a little way and alight again. This was the result after several trials. I think the

reason I could not approach nearer, was that the lantern distributed an equal amount of light in all directions, thus making me visible; had the lantern been so arranged as to cast the rays only ahead, I think I could have walked among them, or at least close to the outside edge of the flock. The above instances seem to show that the only effect was the dazzling of the birds by the brilliant rays of light cast on them from the lantern. This with the absence of any scent or sound sufficient to make the birds suspicious caused them to act in the manner most natural to them. It seems reasonable to infer, that when such a concentration of light is artificially directed at a person, animal, or bird, the same effect is produced as when looking steadily at the sun; in other words, the light is so dazzling to the eyes as to render them incapable of seeing any object for the time being. This seems to me to be the explanation of the effect of the light thrown on the birds from the lantern. Had a noise been made when we were near them, they would have flown away quickly enough, lantern or no lantern.

It seems to me that the principle objection to the use of a light in pursuing waterfowl after dark lies in the fact that such night shooting harasses the birds on their roosting and feeding grounds, which, as anyone who has had any experience knows, causes them to forsake such places and seek others where they will be unmolested. Fire-lighting is generally not remunerative, and the men who follow it have much to contend with, both in regard to weather, birds, and the law. It is likely to be engaged in by only a few of the baymen, as most of their friends who shoot, being day gunners, are opposed to it, knowing well its evil effect on wild fowl. While I regret that my experience has been so limited, I can still congratulate myself that it has been no greater. I present these notes as a slight contribution to the knowledge of a subject on which little has been written.